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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,523	10/18/2001	Gerard Mougey	Q64953	4595

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EXAMINER

PRICE, CARL D

ART UNIT PAPER NUMBER

3749

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/869,523	Applicant(s) MOUGEY, GERARD	
	Examiner CARL D. PRICE	Art Unit 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### **Response to Arguments**

Applicant's arguments, filed 11-08-2004, with respect to the rejection of claims 1-5 under 35 USC 102(b) as being anticipated by US2164263 (Wall) have been fully considered but have not been found to be persuasive.

The examiner disagrees with applicant's statement that US '263 does not disclose or suggest a device as now set forth in the claims. The examiner maintains the position that US2164263 (Wall) shows nozzles (22) which are arranged parallel to the diverging conical wall portion (19) in the same manner broadly set forth in applicant's claims 1-5, albeit the nozzles (22) are arranged in a converging orientation.

Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

In the amendment filed on 11-08-2004 applicant has amended the scope of the claimed invention to be different than that previously considered.

The prior art reference of US2072599 (Lemaitre) is now relied on to address the scope of the invention as now set forth in the claims.

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

*The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).*

### **35 U.S.C. 102(b): Claims 1-5**

Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by  
US2164263 (Wall) (of record).

US2164263 (Wall) shows a device having a central supply (1, 2, 38) comprising:

- a central gas supply tube (38) situated along the axis of a body forming a venturi (16) comprising:
  - an upstream conical converging part (17);
  - an intermediate cylindrical neck part (18); and,
  - a downstream conical diverging part (19);
- a plurality of gas supply tubes (22) are arranged in at least one ring around the central supply gas supply (38);
- at least the ends of the gas supply tubes (22) have their axis appreciably parallel to a wall of the downstream conical diverging part (19).

In regard to claims 2 and 4, each of the six annularly arranged tubes (22) is necessarily sized to carry between 5% and 30% (i.e. - one sixth, or approximately 17%; or, approximately one seventh (14%) when accounting for the flow of the central nozzle

(38)) of the gas. In regard to claims 4 and 5, the diameter, at the inlet end of the central tube of US2164263 (Wall) is shown to be greater than the diameter of the surrounding tubes (22).

With regard to claims 1-5, the recitation “for the combustion of gas containing hydrocarbons that can be burned in the presence of air, in which the fuel gas arrives by a central supply” has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

With regard to claim 1-5, the recitation(s) “for the combustion of gas containing hydrocarbons that can be burned in the presence of air, in which the fuel gas arrives by a central supply”; and, a “gas” supply are deemed to be recitation(s) of the intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). The prior art reference of Wall, being a device for combining and mixing two gas flows, is capable of performing the intended use of a device for the

combustion of gas containing hydrocarbons that can be burned in the presence of air, in which the fuel gas arrives by a central supply. In support of this, applicant's attention is directed to the prior art reference of US3659962 (Zink et al)(of record) which discloses (see figure 4, for example) a gas mixing venture tube device not unlike that disclosed in a US2164263 (Wall) and which is used for the combustion of gas containing hydrocarbons that can be burned in the presence of air, in which the fuel gas arrives by a central supply.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

### **35 U.S.C. 103(a): Claims 1-5**

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over US3659962 (Zink et al)(of record) in view of US2072599 (Lemaitre) and FR000521176(of record).

US3659962 (Zink et al) shows a device having a central supply (28) comprising:

- a central gas supply tube (33) situated along the axis of a body forming a venturi (10) comprising:

- an upstream converging part (12);
- a downstream diverging part (15);
- a plurality of gas supply tubes (36) are arranged in at least one ring around the central supply gas supply (33);
- at least the ends (at 36) of the gas supply tubes have their axis appreciably parallel to a wall (5) of the venture tube.

US3659962 (Zink et al) disclose the invention substantially as set forth in the claims with possible exception to:

- a venturi (10) comprising an upstream “conical” converging part; and,
- at least the ends of the gas supply tubes have their axis appreciably parallel to a wall of the downstream conical diverging part.

US2072599 (Lemaitre) shows a device having a central supply (3, 7) comprising:

- a central gas supply tube (7) situated along the axis of a body forming a venturi comprising:
  - an upstream converging part (not referenced);
  - a downstream diverging part (5);
  - a plurality of gas supply tubes (4) are arranged in at least one ring around the central supply gas supply (7);
  - at least the ends (at 4) of the gas supply tubes have their axis appreciably parallel to a wall (5) of the downstream diverging part (5).

FR000521176 teaches from the same device mixer field of endeavor as

US3659962 (Zink et al), a mixing device having:

- a central gas supply tube (11, 12, 13) situated along the axis of a body forming a venturi (2) comprising:

- an upstream conical converging part (2a);
- an intermediate cylindrical neck part (2b); and,
- a downstream conical diverging part (2c);
- a plurality of gas supply tubes (6, 7, 14) are arranged in at least one ring around the central supply gas supply (11, 12, 13);
- at least the ends of the gas supply tubes (not referenced) have their axis appreciably parallel to a wall of the downstream conical diverging part (19); and,
- the diameter the central tube (13) of FR000521176 is shown to be greater than the diameter of the surrounding tubes (22).

In regard to claims 1-5, for the purpose of more effectively mixing the gases, it would have been obvious to a person having ordinary skill in the art to orient at least the ends (34, 36) of the gas supply tubes in US3659962 (Zink et al) such that the axis of each tube appreciably parallel to the downstream conical diverging part (11), in view of the teaching of US2072599 (Lemaitre).

Also, in regard to claims 1-5, for the purpose of providing a suitable alternative venturi structure, it would have been obvious to a person having ordinary skill in the art to modify the venture of US3659962 (Zink et al) to include an upstream “conical” shaped converging part, and to orient at least the ends (34, 36) of the gas supply tubes in US3659962 (Zink et al) such that the axis of each tube appreciably parallel to the downstream conical diverging part, in view of the teaching of FR000521176.

In regard to claims 2 and 4, each of the six annularly arranged tubes (4) is necessarily sized to carry between 5% and 30% (i.e.- one sixth, or approximately 17%; or, approximately one seventh (14%) when accounting for the flow of the central nozzle (7)) of the gas.



In regard to claim 4 and 5, to make the diameter of the central tube of **US3659962** (**Zink et al**) to be greater than the diameter of the surrounding tubes would have been obvious to a person having ordinary skill in the art in view of the teaching of FR000521176.

**Conclusion**

See the attached PTO FORM for prior art made of record that is not relied upon and which are considered pertinent to applicant's disclosure.

**THIS ACTION IS MADE FINAL**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**USPTO CUSTOMER CONTACT INFORMATION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Carl D. Price** whose telephone number is **(571) 272 - 4880**. The examiner can normally be reached on Monday through Friday, between the hours of **6:30 am** and **3:30 pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Ira Lazarus** can be reached on **(703) 308-1935**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (**PAIR**) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).



Carl D. Price  
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